

7/14/00

Maine Yankee Loading Scheme

Summary:

- Maine Yankee needs to load 60 casks to empty the spent fuel pool.
- 33 of those 60 casks are dependent on the amendment for authorized contents.
- 27 casks are available to be loaded when the NAC-UMS is approved in Fall of 2000, which supports the April 2001 loading date.
- Reduced heat loads were part of a revised amendment request in April, 2000, to extend the allowable loading time frames. MY will still have to load some casks with high heat loads and within the existing time frames, even if the amendment is approved.

Supporting Data:

Maine Yankee has 1,434 spent fuel assemblies in the pool.

At 24 assemblies per cask, MY needs 60 casks

Maine Yankee's amendment sought specific approval for 661 assemblies, or 46% percent of their spent fuel pool. The request covers consolidated fuels, fuel with CEA's and thimble plugs, fuel rods removed, variable enrichments, damaged fuel, high burnup, etc.

The remaining 54% of the MY pool (CE 14 x 14's) will be authorized under the basic NAC-UMS, which will be approved in October of 2000.

Maine Yankee has 168 assemblies with CEA's, which require a longer canister, which equals 7 casks. These 7 casks are amendment dependent.

Maine Yankee needs a known 104 corner positions, with 4 corner positions per cask, or 26 casks, for special fuel types (including damaged fuel). These 26 casks will accommodate the remainder of the MY contents (periphery positions and assemblies eligible for any position) with 131 slots left for standard 14 x 14 fuel assemblies.

Therefore, since MY needs to load 60 casks, and (26 + 7) 33 casks are known to need approval of the Maine Yankee amendment for loading, 27 casks could be loaded when the NAC-UMS is approved in Fall of 2000. This supports the Maine Yankee loading schedule of April, 2001.

The Maine Yankee amendment is scheduled to be approved and through rulemaking by August of 2001, when the remaining 33 casks would be authorized.

The Maine Yankee amendment also seeks additional time to vacuum dry and helium backfill, which will not be approved until the amendment is approved. This was identified and requested in April of 2000. The current loading times that are about to approved for the NAC-UMS are consistent with the existing approved NAC-MPC. The cask user's will be loading some casks with heat loads approaching the design bases, and will have to do so in accordance with the existing time frames.

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